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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/047,950	01/15/2002	Henry F. McIntyre	9D-EC-19976/064853-040	4820
29391	7590	06/19/2006	EXAMINER	
BEUSSE WOLTER SANKS MORA & MAIRE, P. A.			O'CONNOR, GERALD J	
390 NORTH ORANGE AVENUE			ART UNIT	
SUITE 2500			PAPER NUMBER	
ORLANDO, FL 32801			3627	

DATE MAILED: 06/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/047,950	<b>Applicant(s)</b> McIntyre et al.	
	<b>Examiner</b> O'Connor	<b>Art Unit</b> 3627	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE THREE MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on March 29, 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) 14-27 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on January 15, 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                                                        |                                                                                         |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input checked="" type="checkbox"/> Other: <u>A &amp; B</u>                          |

## **DETAILED ACTION**

### ***Preliminary Remarks***

1. This Office action responds to the arguments filed by applicant on March 29, 2006 in reply to the previous Office action on the merits, mailed December 29, 2005.

### ***Election/Restriction***

2. This application contains claims 14-27 drawn to an invention nonelected with traverse in the reply filed September 30, 2005. A complete reply to the final rejection must include cancellation of the nonelected claims or other appropriate action (37 CFR 1.144). See MPEP § 821.01.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

4. Claims 1, 2, and 4 are rejected under 35 U.S.C. 102(e) as being anticipated by Bloom (US 6,974,928).

Bloom discloses a computer-implemented method for managing electronic data over a telecommunications medium indicative of information pertaining to the transport of a product between a point of origin and a point of destination comprising the steps of: creating a plurality of data files in a database for storing respective consumer-related and product-related information; storing data indicative of consumer-related and product-related information associated with the product in a respective data file, the database accessible by a computer server system at a service center; creating an inventory record containing data indicative of a condition status of the product; storing the inventory record in a respective one of the plurality of data files; initializing a processing module stored on a portable computing device having a display screen by inputting into the portable computing device electronic data indicative of a unique customer number associated with the transport of the product between the point of origin and the point of destination, the portable computing device being capable of scanning barcodes wherein the processing module is programmed to generate a series of questions with respect to the transport of the product and display the questions on the display screen; in response to at least one of the series of questions, inputting into the portable computing device electronic data indicative of a reason code if the product is being returned from the point of destination;

transmitting over the telecommunications medium to the computer server system the electronic data input into the portable computing device in response to the at least one of the series of questions; and, updating the inventory record stored in the database with the transmitted electronic data if a condition status of the product has changed.

Regarding claim 2, the method of Bloom further comprises: in response to at least one of the series of questions, inputting into the portable computing device electronic data indicative of a product type code associated with the product; and, in response to at least one of the series of questions, inputting into the portable computing device electronic data indicative of at least one code indicative of damage information associated with the product if the product is damaged.

Regarding claim 4, the method of Bloom further comprises: creating the unique customer number in response to a consumer purchasing at least one product; associating the unique customer number with a respective one of the plurality of data files containing data indicative of consumer-related and product-related information associated with the purchase of the at least one product; determining whether a delivery of the at least one product to the point of destination is a split delivery; in response to a question generated by a processing module stored on the portable computing device and displayed on the display screen, inputting into the portable computing device electronic data indicative of whether the delivery is a split delivery; and, scheduling a second delivery if the delivery is a split delivery.

5. Claims 1, 2, and 5 are rejected under 35 U.S.C. 102(e) as being anticipated by Kantarjiev et al. (US 6,975,937).

Kantarjiev et al. disclose a computer-implemented method for managing electronic data over a telecommunications medium indicative of information pertaining to the transport of a product between a point of origin and a point of destination comprising the steps of: creating a plurality of data files in a database for storing respective consumer-related and product-related information; storing data indicative of consumer-related and product-related information associated with the product in a respective data file, the database accessible by a computer server system at a service center; creating an inventory record containing data indicative of a condition status of the product; storing the inventory record in a respective one of the plurality of data files; initializing a processing module stored on a portable computing device having a display screen by inputting into the portable computing device electronic data indicative of a unique customer number associated with the transport of the product between the point of origin and the point of destination, the portable computing device being capable of scanning barcodes wherein the processing module is programmed to generate a series of questions with respect to the transport of the product and display the questions on the display screen; in response to at least one of the series of questions, inputting into the portable computing device electronic data indicative of a reason code if the product is being returned from the point of destination; transmitting over the telecommunications medium to the computer server system the electronic data input into the portable computing device in response to the at least one of the series of

questions; and, updating the inventory record stored in the database with the transmitted electronic data if a condition status of the product has changed.

Regarding claim 2, the method of Kantarjiev et al. further comprises: in response to at least one of the series of questions, inputting into the portable computing device electronic data indicative of a product type code associated with the product; and, in response to at least one of the series of questions, inputting into the portable computing device electronic data indicative of at least one code indicative of damage information associated with the product if the product is damaged.

Regarding claim 5, the method of Kantarjiev et al. further comprises: establishing a set of conditions for an authorized return; crediting a customer for a return of the product if the set of conditions is met; and, notifying a financial services group that a customer has been credited for the return of a product.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art, as described in the written description of the specification.

As described by applicant in the written specification, the instant invention is merely a method of using conventional, well known computer equipment in order to implement and effect an automated method for accomplishing the same well known results as had heretofore been accomplished via manual means (such as those described, for example, in the Background of the Invention, on pages 1-3 of the written specification).

As such, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have modified the conventional manual method of managing information pertaining to the transport of a product between a point of origin and a point of destination, so as to make use of well known, conventional equipment, including barcodes, barcode scanners, and various computers loaded with appropriate software, the barcode scanners and other computers being any of portable, non-portable, or handheld, in order to derive the claimed features of the instant invention, the motivation to make the modifications being simply to improve the efficiency of the information management process pertaining to the transport of a product between a point of origin and a point of destination by reducing the amount of manual effort required, since so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results, and since it has been held that simply providing a mechanical or automatic means to replace manual activity which has accomplished the same result involves only routine skill in the art. *In re Venner*, 120 USPQ 192.



8. Claims 3 and 6-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bloom (US 6,974,928).

Bloom discloses a computer-implemented method for managing electronic data over a telecommunications medium indicative of information pertaining to the transport of a product between a point of origin and a point of destination, as applied above in the rejection of claim 1 under 35 U.S.C. 102(e), but Bloom fails to specifically disclose inputting a damage code comprising a damage type, a surface type, and damage location. However, inputting a description of the damage to a delivered item being returned because of the damage is certainly a step that is well known, hence obvious, to those of ordinary skill in the art, and official notice to that effect is hereby taken. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have modified the method of Bloom so as to include the step of inputting a description of the damage comprising a damage code, the code comprising a damage type, a surface type, and a damage location, as is well known to do, in order to describe the damage, and since so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

Further details of the additional dependent claims would all be either inherent in the method of Bloom, or else self-evident or well known, hence obvious, to those of ordinary skill in the art, such that it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have made any necessary modifications, merely as a matter of design choice, since

so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

9. Claims 3 and 6-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kantarjiev et al. (US 6,975,937).

Kantarjiev et al. disclose a computer-implemented method for managing electronic data over a telecommunications medium indicative of information pertaining to the transport of a product between a point of origin and a point of destination, as applied above in the rejection of claim 1 under 35 U.S.C. 102(e), but Kantarjiev et al. fail to specifically disclose inputting a damage code comprising a damage type, a surface type, and damage location. However, inputting a description of the damage to a delivered item being returned because of the damage is certainly a step that is well known, hence obvious, to those of ordinary skill in the art, and official notice to that effect is hereby taken. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have modified the method of Kantarjiev et al. so as to include the step of inputting a description of the damage comprising a damage code, the code comprising a damage type, a surface type, and a damage location, as is well known to do, in order to describe the damage, and since so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

Further details of the additional dependent claims would all be either inherent in the method of Kantarjiev et al., or else self-evident or well known, hence obvious, to those of

ordinary skill in the art, such that it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have made any necessary modifications, merely as a matter of design choice, since so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

***Response to Arguments***

10. Applicant's arguments filed Mar. 29, 2006 have been fully considered but are not persuasive.

11. Regarding the argument that the applied prior art references are complex and applicant cannot therein find all of the recited elements of the claims, attached is a keywords-in-context text search report for each of the two patent references, highlighting certain particularly relevant terms. Hopefully, applicant will find the reports helpful in locating the particularly relevant portions of each document and better understanding the pertinence of each document. Note that the reports do not highlight all elements of applicant's claims, only those terms that would be considered the most difficult to find in any large reference/document.

12. Regarding the argument that the admitted prior art, as described on pages 1-3 of the specification, fails to include any conventional manual method, the specification indeed includes that there is a conventional manual method, which manual method the invention seeks to improve through the implementation of certain automation. See, for example, page 2, lines 11-21, as well as page 3, lines 1-5.

13. Regarding the argument that the instant invention is not simply a computerization of an old method performed manually, as evidenced by the many disadvantages of the prior art manual method that have now been overcome by the computerization provided by the invention, even an ingenious application of known principles to known problem by use of devices already known and understood to produce predictable result does not amount to invention. Moreover, the fact that an invention may produce a more efficient and more economical method of accomplishing result does not constitute invention. *Barrott et al. v. The Drake Casket Company*, 127 USPQ 69.

Furthermore, applicant acknowledges (last paragraph of page 13 of the reply) that the various elements of computerization are all well known elements, and, notably, fails to mention any new functionality performed by the invention other than simply performing the conventional process using the well known computer elements. Note that steps such as “managing information” were indeed necessarily, thus inherently, performed by the underlying known manual method, even if such steps were not explicitly described by applicant with respect to the conventional process.

14. Regarding the argument that a rejection cannot be based on applicant’s disclosure because such basis would comprise improper hindsight, applicant’s disclosure comprises two elements: disclosure of prior art, and disclosure of the instant invention. The later of these cannot be used as a basis for the rejection, as that would indeed constitute improper hindsight. However, the former of these two elements, applicant’s disclosure of the prior art known to applicant at the time of the invention, can certainly be used properly as the basis for a prior art rejection.

When applicant states that something is prior art (whether with or without any explicit statement or label as “Prior Art,” it is taken as being available as prior art against the claims. Moreover, admitted prior art can indeed be used in obviousness rejections. *In re Nomiya*, 509 F.2d 566, 184 USPQ 607, 610 (CCPA 1975). See MPEP § 2129.

15. Regarding the argument in support of applicant’s traversal of official notice that “the act of inputting into a portable computing device electronic data indicative of at least one of a code indicative of a damage type...” was not well known at the time of the invention, the traversal is not a proper traversal because it misstates the officially noticed facts. Inputting such data into a portable computing device was never stated as being well known, merely the act of setting forth a reason for the return (i.e., on paper, by hand, etc.), such as described, for example, in applicant’s background of the invention section of the specification, on pages 1-3.

16. Regarding the argument that determining when a product should be picked up was not well known at the time of the invention, determining when a product should be picked up was well known long before applicant’s invention. For example, delivery companies such as UPS do not simply go to random houses hoping that somebody will have a package for them to pick up. They go to houses where they have determined a customer has a package to be picked up, based on the customer contacting and notifying UPS, albeit again, not necessarily electronically.

17. Regarding the argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 170 USPQ 209 (CCPA 1971).

#### ***Conclusion***

18. The prior art made of record and not relied upon is considered pertinent to the disclosure.

19. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

20. Any inquiry concerning this communication, or earlier communications, should be directed to the examiner, **Jerry O'Connor**, whose telephone number is **(571) 272-6787**, and whose facsimile number is **(571) 273-6787**.

The examiner can normally be reached weekdays from 9:30 to 6:00.

If attempts to reach the examiner are unsuccessful, the examiner's supervisor, Mr. Alexander Kalinowski, can be reached at **(571) 272-6771**.

Official replies to this Office action may be submitted by any *one* of fax, mail, or hand delivery. **Faxed replies are preferred and should be directed to (571) 273-8300**. Mailed replies should be addressed to "Commissioner for Patents, PO Box 1450, Alexandria, VA 22313-1450." Hand delivered replies should be delivered to the "Customer Service Window, Randolph Building, 401 Dulany Street, Alexandria, VA 22314."

GJOC

June 12, 2006



6/12/06

Gerald J. O'Connor  
Primary Examiner  
Group Art Unit 3627

Attachment A

(Page 1 of 6) 10/047,950  
#20060612

US-PAT-NO: 6974928

DOCUMENT-IDENTIFIER: US 6974928 B2

TITLE: Method and apparatus for efficient package delivery and storage

DATE-ISSUED: December 13, 2005

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Bloom, Gregg	Lauderdale by the Sea	FL	N/A	N/A

APPL-NO: 09/ 810903

DATE FILED: March 16, 2001

US-CL-CURRENT: 209/583, 700/215 , 700/242 , 700/243

ABSTRACT:

A method and system for the efficient bulk package delivery for recipients. Items ordered by different customers from different retailers, suppliers or manufacturers can be organized by common item identifiers and shipped in bulk from retailers or manufacturers, to an origination regional distribution center. The items can be sorted at the origination regional distribution center in bulk based on the location of destination regional distribution centers that can serve destination centralized pickup locations chosen by the customers placing the orders for those items. Ordered items can be sorted by recipient and the destination centralized pickup location specified in the customer's order and packed into recipient-specific packages at the destination regional distribution center. The packages can be transported in bulk to the destination centralized pickup locations where they can be randomly loaded into any available locker bins in an automated system of stationary and moveable, configurable storage locker bins. During loading, an association can be made between an identifier of the locker bin and an identifier of the bulk delivered package for subsequent self service identification and retrieval. An electronic notification of the delivery can be automatically dispatched to the recipient by the automated system of storage locker bins to alert the recipient of the delivery.

45 Claims, 25 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 25

----- KWIC -----

US Patent No. - PN (1):  
6974928

Brief Summary Text - BSTX (7):

Inherent in these delivery and handling processes are numerous inefficiencies that in the end, result in increased cost. Firstly, the packages of ordered items are packed inefficiently for the entire distance that they are transported. This is due to the nature of trying to pack items of different shapes and sizes into a box or container that is large enough to hold all the items, with added packing materials to prevent the differently shaped items from damaging each other during transport. Secondly, packages are moved from cargo-carrying vehicles and packages sorting facilities a numerous amount of times as packages are distributed. The packages are moved from a delivery vehicle to a facility and vice-versa. At each point that a package changes



hands when being routed through a package shipper's distribution network, it is resorted and grouped with other packages to fit onto the next cargo-carrying vehicle. This translates to an increased shipping and handling cost. Thirdly, each package delivered to its final distribution center has to be carried on an individual basis to the recipient's delivery address. The packages are delivered to recipient addresses on smaller cargo-carrying vehicles and can only be delivered during reasonably acceptable business hours. If the recipient is not available at the time of the attempted delivery, a package may either be left outside of a recipient's home where it is susceptible to theft, mischief, or weather damage, or it may remain undelivered until a further delivery attempt is made. The shipping cost is further compounded in instances where several attempts have to be made to finalize the delivery.

Detailed Description Text - DETX (8):

Customers who choose the ePD delivery option can enter their ePD customer identification number (Customer Id) and choose the CDC identifier (CDC Id) of a CDC 1190-1 where they want to pick-up their order. Customers who have used the ePD option in the past can be optionally shown (on a web page or be told over the phone) a default destination centralized pickup location (CDC) 1190-1--one that the customer previously provided as a preference or the last CDC 1190-1 they selected if they have not provided a preference. At this point a customer can select the default CDC 1190-1, input a different CDC Id or search for a different suitable CDC 1190-1 by providing appropriate search criteria including, but not limited to a zip code, a city name or a street name. Upon entering the appropriate search criteria, a customer can receive a listing of the nearby CDC locations 1190-1, for example, through a web page or over the phone. As an illustrative example, the listing can have the top five closest CDC locations 1190-1 to the search criteria. CDC's 1190-1 returned from a search can be listed in order from closest to farthest. If city is entered, a complete listing of CDC locations 1190-1 within or near the metro area of the entered city can be given including the full address of those CDC locations 1190-1.

Detailed Description Text - DETX (87):

Referring to FIG. 4, in one embodiment of the invention, the package creating side of a CDC packing station (45) can consist of a rack frame (70) made of metal or a suitable composite which can contain, for example, multiple wire mesh package bag holders arranged in rows. For illustrative purposes, there can be 11 package bag holders arranged into two rows. Likewise, there can be two different sizes of package bag holders. A CDC packing station (45) can have, for example, large package bag holders (71) in three of its corners. For example, five of its eight small package bag holders (72) can be spaced a few inches apart between the two large package bag holders (71) in the second row of the packing station. The other three small package bag holders (72) can be in the front row of the packing station--one can be directly in front of the middle small package bag holder (72) of the second row and two can be spaced a few inches apart, directly in front of one of the large package bag holders (71) in the second row of the packing station. There can be sufficient space inside the front row of the packing station to allow free access to the surrounding package bag holders or any of the components on the back console of the packing station (78). The package bag holders can be spaced a few inches apart from each other on each side and there can be a few inches of space between the front and second rows. The tops of the package bag holders in the second row can be raised a few inches above the tops of the package bag holders in the first row. The wire mesh package bag holders can be open at the top, having four sides and a bottom. Each package bag holder can have a fixed location barcode label plate (74) mounted just above its top edge either a few inches in front of the center of its top front edge (for the package bag holders in the front row) or a few inches behind the center of its top back edge (for the package bag holders in the second row). A fixed location barcode label plate (74) can be a thin metal or plastic plate with a barcode label affixed to it, and can be attached to the bottom of a package bag holder (71 or 72), for example, by two thin metal beams which can extend out one or more inches from the front or back side of the package bag holder and can run parallel to the front or back side of the package bag holder. A fixed location barcode label plate (74) can be designed to allow for a barcode label to be

physically associated with a package bag holder, without being covered and/or blocked by a package bag, which can be placed in and around that package bag holder. A packing station (45) can also have, for example, two packing material storage bins (76) on either side of the back console (78) extending from and attached to the back of the rack frame of the packing station (70). These two bins (76) can be made of material, such as, wire mesh or comparable material similar to the package bag holders. The packing material storage bins (76) can be used to store bubble wrap packing sheets which can be packed between items within a package bag to protect those items from damage. The back console (78) of the CDC packing station (45) can be situated behind the rack frame (70) of the CDC packing station (45) in between the two storage bins (76). The back console (78) can have, for example, a program display monitor (79), a keypad (80), a packing document printer (77), and a label printer (81). There can be two package bag storage dispensers (82) located on either side of the back console (78) at approximately the same height as the program display monitor (79). Each of the package bag storage dispensers (82) can have an open back to facilitate loading and an opening (83) in the center of its front side, through which a worker can take package bags as they can be needed. One of the package bag storage dispensers (82) can be used to dispense small package bags while the other can be used to dispense large package bags.

Detailed Description Text - DETX (88):

In a further embodiment, specially designed ePD package bags can be used in creating packages. ePD package bags can be made of material, for example, plastic bubble wrap, which can be approximately one inch in thickness. Pre-sized plastic bubble wrap bags can advantageously cushion and protect items from damage while in transit or in a Smart Bin Unit (SBU) at a CDC 1190-1. Furthermore, pre-sized bags can ensure a proper fit for the SBU bins at a CDC 1190-1 when delivered. For illustration, the outer dimensions of the small package bags can measure 12 inches by 17 inches by 40 inches, with an inner capacity of 10 inches by 15 inches by 24 inches. The opening of the small package bag can be approximately 10 inches by 15 inches with the thickness of the sides of the bubble wrap bag accounting for the other approximate two inches of each outer dimension. The small package bag can have a pre-marked capacity fill line on it located at approximately 25 inches from the bottom of the bag. As an illustration, the height of the bag can consist of approximately 24 inches of inner capacity on top of one inch of the bottom of the bag's thickness, with approximately 15 inches of height allowing for the bag to be cinched closed at the top--8 1/2 inches (one-half of 17 inches, the larger of the bag opening's dimensions) to bring the widest sides of the bag together, plus another 6 1/2 inches (approximately a handful) of extra material above the point where the bag is cinched. The outer dimensions of the large bags can measure 28 inches by 17 inches by 63 inches, with an inner capacity of 26 inches by 15 inches by 44 inches. The inner capacity dimensions can be calculated in the same manner as for the small bag, but the large bag can have three pre-marked capacity fill lines on it--at 21, 33, and 45 inches. In an alternate embodiment of the invention, other material suitable for packing can be utilized. This can include cardboard boxes, packaging paper, or other material known in the art.

Detailed Description Text - DETX (102):

The displayed message can direct the worker to pack the indicated quantity of the item in the scanned case into the package bag represented by the highlighted package bag indicator (110) and scan the fixed location barcode label plate (74) of the highlighted package bag. The Package Creation Program (330) can determine which package bag indicator (108) to highlight from a Package Bag Holder Id on the selected Open Package List record 1232. A Package Bag Holder Id can be a fixed value that represents a particular package bag holder (71 or 72) on a packing station (45) and the package currently in that package bag holder (71 or 72). The Package Creation Program (330) can determine the value to display in the pick quantity indicator field (112) by selecting the Quantity on the underlying Order Detail record 1202 of the transaction. To select the transaction's underlying Order Detail record 1202, the Package Creation Program (330) can search for a record 1202 containing the Customer Id, for which it was able to find a match between the Open Package List record 1232 and the Customer By SKU Order List record 1228, the current

CDC Id, and the ePD Retailer Id and SKU of the scanned case. If the recipient (represented by Customer Id) has more than one open order (Order Detail record 1202 having a Status such as "destination RDC") for the current CDC 1190-1 or LDDH 1192-1 containing the item of the scanned case, the Order Detail record 1202 associated with the Order Header record 1200 having the earliest Order Date/Time can be selected. Upon hearing the pick confirmation tone or seeing the pick confirmation light (84) flash (or recognizing another indicator to pick an item from the scanned case), the worker can pick the case from the CDC packing station conveyor (44) and for example, place it on top of the packing station--on either the package sealing side (FIG. 5) or the package creation side (FIG. 4). The worker can look at the case label to determine if the case is a single-item case or a multi-item case. If the case label does not have an indicator, such as a large "S" printed on it, to indicate a single-item case, the worker can, for example, open the case (if it has not already been opened), pick the indicated quantity of items from the case, pack the indicated quantity of items into the highlighted package bag, enter the picked quantity using for example, the packing station keypad (80), and scan the fixed location barcode label plate (74) associated with the highlighted package. When packing the items into the package bag, the worker can use packing materials such as bubble wrap packing sheets, which can be stored in the packing material storage bin (76), as needed to protect the items from damage.

Detailed Description Text - DETX (193):

If the value of the Primary Contact Frequency is not zero or if the Last Primary Contact Date/Time field has no value, the Notification Program (360) can calculate one input data value--the number of days since the first notification--by subtracting the First Notification Date/Time on the current Notification Queue record 1311 from the current date/time and rounding down to the number of whole days. The program can compile other input data values by selecting, for example, the Primary Contact Number/Address value from the Customer record 1256, the First Notification Date/Time, Total Number of Packages, and New Indicator values from the Notification Queue record 1311, the current date/time, and the value of the current CDC's 1190-1 address. The value of the current CDC's 1190-1 address can be pre-configured for the instance of the program (360) running on the current CDC's 1190-1 server. If the value of Primary Contact Type on the selected Customer record 1256 is a value such as "phone", the Notification Program (360) can initiate the Auto-call Program (362) and pass it the compiled input data values. The Auto-call Program (362) can use the Primary Contact Number/Address value to dial the recipient's phone number and play a pre-recorded message to notify or remind the recipient that there is at least one bulk delivered package at the CDC 1190-1, ready to be picked up. The pre-recorded message can include at least the value of the current CDC's 1190-1 address (the values in the Address 1 and Address 2 fields of the current CDC's 1190-1 record on the CDC table 1252), and can also include, but is not limited to, the current date/time, the value of the Total Number of Packages, an indication of whether or not a bulk delivered package has been delivered since the last notification message (determined from the New Indicator value), the number of days since the first notification (calculated as previously described), the First Notification Date/Time, general shipper policy information (including early pickup incentive discounts and late pickup penalties), contact information to submit questions, and other general information.

Detailed Description Text - DETX (220):

The term "retailer" can be referring to one of a retailer's or manufacturer's or other equivalent business' order fulfillment operations, if they operate multiple order fulfillment operations. If a retailer does operate multiple order fulfillment operations, each one can be identified by its own ePD Retailer Id. A retailer's item returns processing facility can be identified by a Returns Facility Id, can have a Returns Local Market Id associated with it, and can be assigned to each distinct ePD Retailer Id on the Retailer table 1246. Before creating a new Item Return Header 1266 and Item Return Detail records 1268, the CDC Returns Program (378) can select the ePD Shipper Id from the record on the RDC table 1258 having the RDC Id embedded in the Package Id of the scanned item return barcode. The CDC Returns Program (378) can also select the Returns Local Market Id from the record on the

Retailer table 1246 having the ePD Retailer Id embedded in the Order Id from the scanned item return barcode. After selecting the ePD Shipper Id (of the original bulk delivered package) and the Returns Local Market Id (of the retailer of the original bulk delivered package) the CDC Returns Program (378) can select the RDC Id from the RDC-Local Market table 1264 having the selected ePD Shipper Id value and a Local Market Id equal to the value of the selected Returns Local Market Id (the RDC associated with the shipper for that retailer's returns facility--referred to as the origination RDC for the current item return package). The new Item Return Header record 1266 can be created with, for example, the selected ePD Shipper Id, Returns Local Market Id, and RDC Id values, the Customer Id from the ePD customer access card, the current CDC Id, a Status value such as "in CDC", the ePD Retailer Id embedded in the Order Id from the scanned item return barcode, and an Item Return Creation Date/Time equal to the current date/time. The Item Return Detail record 1268 can be created with, for example, the SKU, Package Id, and Order Id from the scanned item return barcode and the Return Quantity, Return Reason Code, and Return Reason Comment that the recipient entered and selected using the workstation keyboard. The Item Return Id on both new records can be set, for example, to a concatenation of the ePD Retailer Id+Customer Id+CDC Id+current date+a value such as "IR"+a sequential 3 digit number. After a recipient performs the actions to initiate the return of an item and the CDC Returns Program (378) successfully creates a new record on the Item Return Header 1266 and Item Return Detail 1268 tables, the CDC Returns Program (378) can, for example, sound a confirmation tone, display a confirmation message to confirm that the item return transaction has been recorded successfully, print an item return package label, and start a returns conveyor (156). The item return package label can include, but is not limited to the following information: the RDC Id, Returns Local Market Id, and Item Return Id printed in readable format and the Item Return Id printed in barcode format.

Detailed Description Text - DETX (221):

The recipient can return another item from the same packing list or a different packing list by scanning its item return barcode, keying in the Return Quantity, selecting a Return Reason Code, and entering a Return Reason Comment. If a subsequent item being returned is from the same packing list or from a different packing list that is from the same retailer, an additional Item Return Detail record 1268 can be created for that item return transaction with the same Item Return Id as the records 1268 created for the previous item return transaction (since both transactions are for the same retailer). If a subsequent item being returned comes from a packing list of a different retailer, the CDC Returns Program (378) can create a new set of Item Return Header 1266 and Item Return Detail 1268 records and can print a new item return package label for the item return transaction. A new item return package label can be created for each new set of Item Return Header 1266 and Item Return Detail 1268 records.

Detailed Description Text - DETX (223):

An item return can be performed at any CDC 1190-2 running the CDC Returns Program (378), regardless of to which CDC 1190-2 the bulk delivered package that contained the items was originally delivered. Even items, in packages that were moved through a LDDH 1192-2 and delivered directly to customer specified addresses, can be returned using the CDC Returns Program (378) at a CDC 1190-2. In a further aspect of the invention, the ePD Delivery Process can also allow a customer to send a package to a CDC 1190-2 or a specific address for a recipient through a method similar to processing an item return. There is also shown in FIG. 13, an illustrative embodiment depicting the steps that can be used to enable a customer to efficiently ship a package from one CDC 1190-2 to another CDC 1190-3 for a recipient. A customer or someone sending a package, can create a CDC outbound package for a recipient, step 1401, for example, by putting items in an ePD package bag and sealing it using an ePD package tie. In step 1401, larger items suitable for shipping (packed in a large box or container or wrapped with protective material to prevent damage) can also be shipped as a CDC outbound package, provided the larger items are not larger than the largest configurable SBU bin, if shipping to a CDC 1190-2. A package sender can use a package bag and package tie from a bulk delivered package the package sender had previously received, or the package sender can

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take a new package bag and package tie from the packing materials dispensers at an outbound package workstation (159). A package sender can bring a package that the package sender wishes to send, a CDC outbound package, to an outbound package processing workstation (159) at any CDC 1190-2 in which the shipper, that the package sender intends to deliver their package, accepts CDC outbound packages. An electronic scale can be connected to, for example, an outbound package processing workstation (159) and can be used to calculate a package sender's ePD shipping cost based upon several factors that can be defined differently for each shipper. Those shipping cost factors can include, but are not limited to Delivery Type, Weight, Package Size, Origination CDC Id, and Destination CDC Id. In one aspect of the invention, a credit card/bank debit card reader with a connection to a payment transaction validation service can be located at and connected to an outbound package processing workstation (159) to enable credit cards and debit cards to be authorized and accepted as payment options. In a further aspect of the invention, a package sender can also have an ePD account, which can be debited as a payment option for the cost of shipping a CDC outbound package.

# Attachment B

(Page 1 of 2) 10/047,950  
#20060612

US-PAT-NO: 6975937

DOCUMENT-IDENTIFIER: US 6975937 B1

TITLE: Technique for processing customer service transactions  
at customer site using mobile computing device

DATE-ISSUED: December 13, 2005

## INVENTOR-INFORMATION:

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APPL-NO: 09/ 568572

DATE FILED: May 10, 2000

PARENT-CASE:

## CROSS REFERENCE TO RELATED APPLICATIONS

The present application claims priority from U.S. Provisional Patent Application No. 60/133,646 entitled ELECTRONIC COMMERCE ENABLED DELIVERY SYSTEM AND METHOD filed May 11, 1999, the entirety of which is incorporated herein by reference for all purposes. The present application also relates to a number of commonly assigned, copending U.S. patent applications filed simultaneously herewith including U.S. patent application Ser. No. 09/568,603 for INTEGRATED SYSTEM FOR ORDERING, FULFILLMENT, AND DELIVERY OF CONSUMER PRODUCTS USING A DATA NETWORK, U.S. patent application Ser. No. 09/568,570 for INVENTORY REPLICATION BASED UPON ORDER FULFILLMENT RATES, U.S. patent application Ser. No. 09/568,614 for REAL-TIME DISPLAY OF AVAILABLE PRODUCTS OVER THE INTERNET, U.S. patent application Ser. No. 09/568,613 for SCHEDULING DELIVERY OF PRODUCTS VIA THE INTERNET U.S. patent application Ser. No. 09/568,823 for LOAD BALANCING TECHNIQUE IMPLEMENTED IN A DATA NETWORK DEVICE UTILIZING A DATA CACHE U.S. patent application Ser. No. 09/568,569, now U.S. Pat. No. 6,622,127 B1, for ORDER ALLOCATION TO SELECT FROM INVENTORY LOCATIONS STOCKING FEW UNITS OF INVENTORY, U.S. patent application Ser. No. 09/566,912, now U.S. Pat. No. 6,332,334 B1, for METHOD AND APPARATUS FOR HANDLING AND TRANSPORTING TEMPERATURE-SENSITIVE ITEMS, and U.S. patent application Ser. No. 09/568,571 for ORDER ALLOCATION TO MINIMIZE CONTAINER STOPS IN A DISTRIBUTION CENTER. Each of the disclosures of these copending applications is incorporated herein by reference in its entirety for all purposes.

US-CL-CURRENT: 701/117, 340/990 , 340/993 , 701/208 , 705/28 , 705/30

## ABSTRACT:

A technique is described for facilitating delivery and adjustments of customer orders at a customer delivery site. A delivery courier is assigned a mobile field computing device for facilitating delivery and order adjustments of customer orders associated with that courier's delivery route. The mobile field computing device includes memory for storing customer order history data and delivery route data downloaded from a server system. The delivery route data stored in the mobile field computing device may be used by the delivery courier to facilitate delivery of the customer orders. Further, the delivery courier may use the mobile field computing device to process a variety of different order adjustment transactions at a customer delivery site.

64 Claims, 7 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 7

----- KWIC -----

US Patent No. - PN (1):  
6975937

## Detailed Description Text - DETX (22):

In accordance with a specific embodiment, the Webstore Subsystem 132 supports a number of customer related features such as, for example, self registration; accessing of customer account information; browsing of product categories and category hierarchy; viewing of product images and product information; keyword searches; delivery scheduling; accessing of customer order history; customizable shopping lists; on-line shopping and ordering; etc.

## Detailed Description Text - DETX (32):

The Customer Relationship Management Subsystem 126 is an interactive application which may be used by customer service representatives (CSRs) 143 to manage customer service requests and to track customer interaction. The functionality provided by the CRM subsystem may include, for example, accessing customer information; issuing credits for various customer issues (e.g. complaints, returns, damaged goods, etc.); handling work flow for processing customer issues; etc. The CRM subsystem provides CSRs (sometimes referred to as customer service operators--CSOs) with the ability to access, view, and edit customer information in accordance with customer requests.

## Detailed Description Text - DETX (70):

For example, a customer may wish to return a container of milk which was purchased in an order that was delivered 2 weeks previously. According to a first implementation, the delivery courier may use the MFD Client to process (324) the returned item by scanning the item's bar code or UPC code. During this processing, the MFD Client may compare the scanned UPC code against a list of UPC codes included in that customer's downloaded order history (which, for example, may include all ordered items within the past 30 days). When a UPC code match is found in the customer order history, the price which the customer paid for the item in the original order is immediately credited back to the customer. Additionally, any tax which the customer paid on the item is also credited back to the customer. If more than one UPC code match is found (meaning that more than one container of milk was purchased by the customer within the last 30 days), the customer order history information relating to the matched UPC codes can be displayed to the courier, and the courier may then select the appropriate matched item to ensure proper processing of the customer return. Alternatively, according to a different embodiment, the delivery courier may scroll through a list of previous ordered items using the MFD Client. The items may be sorted, for example, by order number. When the delivery courier encounters the entry for the previously ordered item which is being returned, the courier may then select that item to thereby cause the MFD Client to process (324) the selected item as a customer return. The courier may also enter one or more pre-defined reason codes to help explain why the customer is returning the item. In this example, the container of milk may be classified as a "scrapped" good, meaning that it will be disposed of rather than being returned to the distribution center for re-sale. Accordingly, the MFD Client need not generate an RMA slip for the returned container of milk.